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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/980,890	04/17/2002	Michael Noel Kiernan	698.26-US1	1536

34284 7590 06/04/2003

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EXAMINER

JOHNSON, HENRY I

ART UNIT PAPER NUMBER

3739

DATE MAILED: 06/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	Applicant(s)	
09/980,890	KIERNAN ET AL.	
Examiner	Art Unit	
Henry M Johnson, III	3739	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 January 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8 & 9. 6) ☐ Other:

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities:

On page 1, line 17, the rate of collagen is discussed without an object for the term rate (e.g. formation).

On page 4, line 11, the sentence needs to start with a capital letter.

Appropriate correction is required.

Claim Objections

Two claims were numbered 25. The first such claim has been renumbered 24.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 27 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. A beam of illumination is not an apparatus, but rather a non-structural byproduct of a device or apparatus.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-20, 22, 23 and 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the temperature" in line 4. There is insufficient antecedent basis for this limitation in the claim.

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Claim 1 recites the limitation "the target tissue" in line 6. There is insufficient antecedent basis for this limitation in the claim.

Claim 2 recites the limitation "the target tissue" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 3 recites the limitation "the target tissue" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 4 recites the limitation "the body" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 4 recites the limitation "the tissue structure" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim.

Claim 5 recites the limitation "the body" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 5 recites the limitation "the tissue structure" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 6 recites the limitation "the target tissue" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 7 recites the limitation "the predetermined low level" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 8 recites the limitation "the target tissue" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "the wavelength" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 10 recites the limitation "the wavelength" in line 2. There is insufficient antecedent basis for this limitation in the claim.

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Claim 11 recites the limitation "the wavelength" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 18 recites the limitation "the body" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 18 recites the limitation "the site" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 19 recites the limitation "the energy density" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 19 recites the limitation "the range" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 20 is indefinite for citing multiple structures for treatment. Markush wording is suggested.

Claim 22 is indefinite for the use of "and/or" and the term "the target structure" in line 9 has insufficient antecedent basis.

Claim 23 recites the limitation "the zone of radiation" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim.

Claim 25 recites the limitation "the range" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

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applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 4, 7-15, 17, 19 and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Application US 2001/0013349 A1 to Clement et al. Clement discloses a method and apparatus for wrinkle removal by irradiation with narrow (15nm) bandwidth radiation in the range of 570 to 850 nm (Paragraph 0019), with an energy density of 0.5 to 5 J/cm² per pulse (Paragraph 0019) and a pulse duration in the range of 200 μ s to 1 ms (Paragraph 0040) and with spot sizes from 1 to 10 mm (Paragraph 0042). The device lenses and filters external to the area to be treated (Paragraph 0047). The energy is controlled (Paragraph 0044) so as not to exceed 5 J/cm². The wavelength is selected to match the absorption of the target chromophore (Paragraph 0016). The radiation source may be an LED or semiconductor laser (Paragraph 0046).

Claims 1, 3, 5, 6, 18 and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,156,028 to Prescott. Prescott teaches a method for increased collagen deposition using radiation (Col. 2, lines 30-31) that may be delivered via a catheter inserted into a body (abstract), thus bypassing extraneous tissue. Vertical cavity surface emitting lasers are delivered to the treatment area via the catheter (Col. 5, line 64).

Claims 1, 16 and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 5,964,749 to Eckhouse et al. Eckhouse discloses a method and apparatus for wrinkle smoothing by increasing the elasticity of the collagen (Col. 3, line 25) that employs pulsed radiation at from 600 to 1200 nm. The radiation is produced by a flashlamp with a filter system to cut off the unwanted radiation (Col. 4, lines 4-6).

Claims 1, 2, 4, 7, 8-11, 14, 20-27 are rejected under 35 U.S.C. 102(a) as being anticipated by WO 98/24512 to Jones et al. Jones discloses an apparatus for stimulating collagen with a laser radiation source at wavelengths of 585 nm and 694 nm (Page 7, lines 1-4)

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and means for directing the radiation to a target site, external to the site (Fig. 3 and page 5, paragraph 4). The 585 nm wavelength is disclosed for vascular treatment (Page 7, line 3). The directing means may be motor controlled. Jones teaches a focusing means (page 8, lines 10-15). The radiation has a pulse duration of from 200 μ s to 1 ms (Page 6, paragraph 6). A scanning means is disclosed (Page 8, lines 10-16). Control of the irradiation to prevent injury and pain is disclosed (Page 4, lines 5-8).

Conclusion

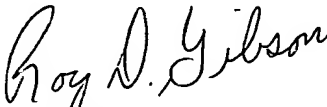
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henry M Johnson, III whose telephone number is (703) 305-0910. The examiner can normally be reached on Monday through Friday from 6:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C Dvorak can be reached on (703) 308-0994. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9302 for regular communications and (703) 872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.

Henry M Johnson, III
Patent Examiner
Art Unit 3739

Hmj
June 2, 2003


ROY D. GIBSON
PRIMARY EXAMINER